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This study determined the feasibility of establishing a neonatal step-down unit (neonatal feed and grow unit/level II nursery) at Eisenhower Army Medical Center to recapture Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) monies currently paid to the Medical College of Georgia, Augusta, Georgia. The author conducted a literature review using resources at the Academy of Health Sciences (AHS), U.S. Army, Fort Gordon, and civilian institutions; interviewed subject matter experts (SME) at the Office of The Surgeon General (OTSG), Health Service Command (HSC), and other Army and civilian medical treatment facilities (MTFs). He developed a conceptual model of a neonatal step-down program; surveyed a hospital ward with respect to its suitability for use as a neonatal step-down unit under the current Department of Defense (DoD) allocation system. Finally, the author presented his conclusions and recommendations in regard to the feasibility of establishing a neonatal step-down unit at DDEAMC.

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A Study to Determine
The Feasibility of Establishing
a Neonatal Step-down Unit
at Eisenhower Army Medical Center
Fort Gordon, Georgia

A Graduate Management Project
Submitted to the Faculty of
Baylor University
in Partial Fulfillment of the
Requirements for the Degree
of
Master of Health Administration
by

Major Stephen Wilkinson, MS

28 June 1993

Running Head: NEONATAL STEP-DOWN UNIT

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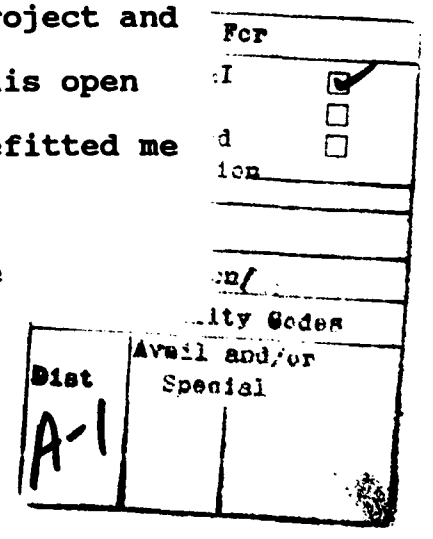

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Abstract

This study determined the feasibility of establishing a neonatal step-down unit (neonatal feed and grow unit/level II nursery) at Eisenhower Army Medical Center to recapture Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) monies currently paid to the Medical College of Georgia, Augusta, Georgia. The author conducted a literature review using resources at the Academy of Health Sciences (AHS), U.S. Army, Fort Gordon, and civilian institutions; interviewed subject matter experts (SME) at the Office of the Surgeon General (OTSG), Health Services Command (HSC), Eisenhower Army Medical Center (EAMC), and other Army and civilian medical treatment facilities (MTFs). He developed a conceptual model of a neonatal step-down program; surveyed a hospital ward with respect to its suitability for use as a neonatal step-down unit; and determined the financial/funding implications of the step-down unit under the current Department of Defense (DOD) allocation system. Finally, the author presented his conclusions and recommendations in regard to the feasibility of establishing a neonatal step-down unit at EAMC.

TABLE OF CONTENTS

PAGE

ACKNOWLEDGMENTS..... i

ABSTRACT.....iii

CHAPTER

I. INTRODUCTION
Background Information..... 1
Conditions Which Prompted the Study.... 1
Problem Statement..... 2
Literature Review..... 2
Purpose..... 9

II. METHOD AND PROCEDURES..... 10

III. RESULTS..... 12

IV. DISCUSSION
Contact with HSC and OTSG..... 13
Input from Hospitals with
Neonatal Step-down Units..... 13
Conceptual Model..... 15
Transportation..... 15
Ward Selection..... 15
Cost Analysis..... 16

V. RECOMMENDATION..... 19

VI. REFERENCES..... 20

APPENDIX
A. DEFINITIONS..... 23
B. STANDARD OPERATING PROCEDURE XXX1..... 25
C. STANDARD OPERATING PROCEDURE XXX2..... 32
D. NEONATAL STEP-DOWN UNIT DIAGRAM..... 36
E. DETAILED COST ANALYSIS..... 38
F. EXPECTED RECOVERABLE CHAMPUS COSTS..... 40
G. FINANCIAL ANALYSIS SUPPORT SYSTEM..... 42
H. PERSONNEL REQUIREMENTS..... 52
I. EQUIPMENT/SUPPLY COSTS..... 54
J. DRG DESCRIPTIONS..... 56

Background Information

Eisenhower Army Medical Center (EAMC) is a 430-bed acute care facility which provides primary, secondary, and tertiary health care in medicine, surgery, psychiatry, clinical psychology, child/adolescent psychiatry, pediatrics, obstetrics and gynecology, and family practice.

This hospital's main objective is to provide comprehensive health care services of the highest quality in a compassionate and timely manner to an active and retired military, and dependent population of over 90,000. As the Southwest regional referral center, EAMC provides tertiary care for an estimated 1.5 million beneficiaries in Georgia Kentucky, Alabama, South Carolina, Florida, Mississippi, and Puerto Rico.

Eisenhower currently operates a level I nursery consisting of 10 bassinets, which provides service for uncomplicated deliveries and healthy newborns. Infants with signs of medical complications and infants who require long-term cardiac or ventilator care are transferred to the Medical College of Georgia (MCG) which operates a level III nursery.

Conditions Which Prompted the Study

The primary condition which prompted the

initiation of this study was the request by the EAMC Gateway to Care Steering Committee to form a subcommittee to study a proposal to establish a Southeast Regional Feed and Grow Neonatal Unit (neonatal step-down unit/level II nursery) at EAMC.

The Catchment Area Management Program initiative, which gives hospital commanders responsibility for CHAMPUS dollars spent in their area, has made the ability to efficiently use allocated resources more important. This study will attempt to save some of these resources by determining the feasibility of establishing a neonatal step-down unit to recapture CHAMPUS dollars currently paid to the Medical College of Georgia for neonatal care.

Problem Statement

To determine if the establishment of a neonatal step-down unit (level II nursery) at Eisenhower Army Medical Center, Fort Gordon, Georgia, will save CHAMPUS expenditures currently paid for neonatal services received from civilian medical treatment facilities in the EAMC region.

Literature Review

Definite gains have been made in the last twenty years in the treatment of critically ill infants. Consequently the cost of this treatment has risen

sharply (Ewald, 1991). For this reason it is important to define the different levels of neonatal care. The most cost effective care is care provided at the appropriate level in a timely manner. For instance, level II nursery care provides an increase in quality of care without the associated costs of a level III nursery (Health Care Advisory Board (HCAB), April 1991; Ewald, 1991).

Levels of Care

Level I neonatal care is provided to a neonate requiring minimal care such as intermittent gavage feeding and phototherapy. Level II care requires modalities such as intravenous services, electronic monitoring, oxygen, or recovery from intensive care. Level III care is given to children requiring mechanical ventilation, exchange transfusions, complete parenteral nutrition, and extensive diagnostic evaluations (Ewald, 1991).

Usually, hospitals require that level II care patients have no need for mechanical ventilation, and/or no need for pulmonary artery catheterization (Teres & Steingrub, 1987). Although organizations such as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) do not provide definitions for all levels of care, most hospitals develop their own

(Lawless, Zaritsky, Phipps, & Riley-Lawless, 1991).

For instance, Wilford Hall United States Air Force Medical Center (WHMC) uses the following level of care definitions:

Level I: "Generally referred to as Term Nursery; provides transitional and routine nursing care for stable newborns."

Level II: "Houses infants who do not require intensive care but require 6-12 hours of nursing care per day."

Level III: "Highest level of medical and nursing care; delivers care to the most critically ill infants." (WHMC NICC OI 168-9, November 1991)

EAMC uses the following level of care definitions:

Level I: "Hospital provides service for uncomplicated deliveries and newborn infants."

Level II: "Hospital provides service for both normal and high risk obstetrical patients and the management of newborns with selected illnesses."

Level III: "Hospital functions as a regional referral center to provide all aspects of perinatal care to include intensive care and a broad range of continuously available subspecialty consultation." (EAMC Newborn Nursery SOP V7, March 1992)

Cost of Care

As more infants are born with low birth weight and at a gestational age of 28 weeks or less, cost of perinatal care is continuing to run higher. The average patient in this category spends 10 days in the intensive care, 20 days in an intermediate care ward, and 50 days in level I care (Ewald, 1991).

Average fees for a neonatologist range from $1,054 for a full-term infant with no complications, to $12,088 for a premature infant weighing less than 1000 grams. The average neonatologist fee for an infant weighing 1500 to 2500 grams that does not require ventilation was 33% less than those needing ventilation. These fees doubled for infants weighing between 1000 to 1500 grams (Resnick et al, September 1988).

Samson (1991) estimates that the fixed cost for any nursing service is $71,122, and the marginal cost estimate for neonates weighing less than 1500 grams is $11,522. He estimates that the fixed cost for tertiary care institutions is $92,214, with the marginal cost estimate $16,141 per case.

Mehl (March 1992) reports that tertiary care institutions in the Colorado region cost an average of $1500 per day for neonates requiring ventilation care.

This equates to over $150,000 per case for an average hospital stay of 137 days.

Terres and Steingrub (1987) felt that if intermediate care was used instead of intensive care for appropriate cases, costs of nursing care would drop due to the ratio of 3-4 patients per nurse as opposed to the standard 1-2 patients per nurse found in most intensive care units. Ewald (1991) lists $500 as the average daily cost of level II neonatal care.

Samson (March 1991) reports that the direct cost of nursing care was higher in hospitals that experienced higher incidence of low birth weight infants. Samson also found that teaching hospitals experienced a higher cost for direct nursing care due to increased numbers of orders and treatments associated with teaching institutions.

Level II Staffing

Physician Staffing Requirements

Most states require a neonatologist either on site or on call 24 hours per day for level II nurseries. The normal response time required of the neonatologist is between five to twenty minutes. In states that do not require a neonatologist on call, staff pediatricians must be on call 24 hours per day. Some states also require that the pediatricians on call have

experience in neonatology (HCAB, March 1990). The Georgia Council on Maternal and Infant Health has established guidelines, which are not legally binding, that suggest level II nurseries be covered by neonatologists on an on-call basis only (HCAB, January 1990).

Nurse Staffing Requirements

The Committee on Hospital Care and the Pediatric Section of the Society of Critical Care Medicine (1983) recommends a patient-to-nurse ratio of one registered nurse (RN) per three patients for level II nurseries.

Most of the hospitals from several states surveyed by the HCAB compared in staffing to the NAACOG recommended staffing ratio of one RN per 3-4 infants in a level II nursery (HCAB, March 1990 & January 1990).

Some hospitals surveyed were augmented by licensed practical nurses on the level II nursery staff.

Nursing Staff Training Requirements

McMullen (Spring 1991) states, "there is no substitute for education, training, supervision, and collaboration in any intensive care setting." Evidence of this opinion can be seen in the case of Edwards v. Our Lady of Lourdes Hospital, 526 A. 2d 242, 217 N.J. Super. 448 (1987). In this case, baby Eugene Edwards, a baby born at 27 weeks gestation. experienced a number

of mishaps due to inexperience of the attending staff of the hospital's neonatal intensive care unit.

Baby Eugene went without oxygen for five to seven minutes because no back-up oxygen was available for his ventilator. An unsupervised medical student performed a venous cutdown in a femoral area (an improper location) of this premature infant. The inexperienced nursing graduate on duty at the time did not question the procedure or the expertise of the medical student to perform the procedure. The baby's leg eventually developed gangrene and had to be amputated at the hip. At trial, the baby was awarded $1,267,530 in compensatory damages (McMullen, Spring 1991).

The Committee on Hospital Care and the Pediatric Section of the Society of Critical Care Medicine (1983) recommends that all RNs in the level II nursery:

> ....be trained in pediatric resuscitation procedures, respiratory care, electronic patient monitoring, and perinatal intensive care unit equipment usage, and should be able to recognize the psychotic (sic) needs of patients and their families. Essential skills should also include the ability to recognize, interpret, and record the often fluctuating signs and symptoms of critically ill patients, administer drugs and

> parenteral fluids and electrolytes, and perform specialized nursing procedure. An adequate period of orientation including 'on-the-job education', should be provided. (p. 756)

Strickley, Forste, and Ellerbrock (1987) echo this concern for professional development and education of the nursing staff by positing that the success of the level II nursing unit depends on these two important areas.

The HCAB found that 50% of the nurses providing level II nursing care had been trained in level III care in a number of hospitals they surveyed. Those nurses without level II experience attended between a two to six week series of classes. These classes were followed by several months of rotations through another hospital's level II nursery before assuming their duties. Completion of the American Academy of Pediatrics and the American Heart Association's "Neonatal Advance Life Support (NALS)" course is also normally required by most hospitals (HCAB, March 1990).

Purpose

The purpose is to determine the feasibility of establishing a neonatal step-down unit (level II nursery) at Eisenhower Army Medical Center, Fort Gordon, Georgia. Specifically, a cost/benefit analysis

was conducted using information from the Financial Analysis Support System (FASS).

Method and Procedures

The author conducted a literature review using resources at the Academy of Health Sciences, U.S. Army, Fort Gordon, and civilian institutions. The author used this information to further determine trends and developments in regard to neonatal intermediate care in the delivery of modern health care.

The author contacted the Office of the Surgeon General and Health Services Command to determine if regulations, guidelines, requirements, or restrictions exist, or are pending, that pertain to the establishment and operation of neonatal step-down units within the Army Medical Department. Also, this information was reviewed to identify problems associated with establishing and operating a neonatal step-down program.

Wilford Hall United States Air Force Medical Center (WHMC), Walter Reed Army Medical Center (WRAMC), Irwin Army Community Hospital (IACH), and University Hospital of Augusta were contacted to obtain copies of their operating procedures for use as a base from which to develop quidelines for the operation of a neonatal step-down program. Additionally, questions were asked

in an effort to ascertain common difficulties and to make an assessment of their implications to the EAMC scenario. Questions asked included but were not limited to the following:

1. What difficulties/problems were encountered by your facility when implementing the neonatal step-down nursery?
2. What training is required for nurses working in your neonatal step-down unit?
3. Was your respiratory therapy staff trained to work with neonates?
4. Are your nurses trained to set up oxygen hoods, monitoring equipment, infusion pumps, and ventilators?
5. Is your laboratory capable of performing micro laboratory procedures?
6. Is your radiology department accustomed to performing portable chest films and abdominal films on small infants?
7. Were any personnel in your hospital required to undergo additional training when you established the neonatal step-down unit?

Based on the literature review and interviews with key members of the medical, administrative, and nursing staffs, a conceptual model of a neonatal step-down program was developed.

In conjunction with nursing service representatives, a hospital ward was surveyed with respect to its suitability for use as the proposed neonatal step-down unit. Suitability was established using requirements established in the Georgia Guidelines for Level II Care.

The author also determined the financial/funding implications of the neonatal step-down program by comparing the current cost of providing services under the CHAMPUS Program to the estimated cost of the same services at EAMC.

Finally, conclusions were drawn with regard to the feasibility of establishing a neonatal step-down unit at EAMC and a recommendation formulated.

Results

This study determined that establishing a neonatal step-down unit at EAMC would not recapture enough of the CHAMPUS monies currently being paid to the Medical College of Georgia and other civilian MTFs for level II care of neonates in the Eisenhower region. The author found that the occupancy rate for such a unit during the first and subsequent years would need to be 91% and 77%, respectively. Historically, an occupancy rate over 75% for a neonatal step-down unit is unlikely.

Discussion

Contact with HSC and OTSG

Initial contact at HSC was with COL Nancy McFaddin, Senior Nursing Staff Officer, HSC Nursing Division. COL McFaddin knew of no HSC or OTSG regulations, guidelines, requirements, or restrictions pertaining to the establishment or operation of neonatal step-down units within the Army Medical Department. She provided the names of points of contact for neonatal step-down units within HSC and suggested I contact the OTSG Clinical Policy Division.

A representative from the OTSG Clinical Policy Division referred the author to COL Leonard Wiseman, the OTSG Neonatal Consultant. A telephonic interview with COL Wiseman revealed again that there is no official OTSG policy pertaining to the establishment and operation of neonatal step-down units. The decision to establish such a unit is left up to the MTF Commander's discretion.

Although no definitive guidance was found at HSC or OTSG, the representatives did share the opinion that neonatal step-down units were beneficial and saved money for the MTFs that have them.

Input from Hospitals with Neonatal Step-down Units

Other DOD and civilian medical treatment

facilities with existing level II neonatal programs were contacted to obtain copies of their operating procedures. These operating procedures were used as a base from which to develop guidelines for the operation of a neonatal step-down unit, and to ascertain common difficulties encountered.

Interviews with the head nurses of neonatal step-down units from WRAMC, IACH, WHMC, and the University Hospital of Augusta, revealed that training of neonatal step-down unit nursing personnel was their major concern. Each head nurse was of the opinion that completion of the "Neonatal Advance Life Support (NALS)" course should be required of nurses who staff level II nurseries. This course is a self-instructional course and requires completion of a written test and practical examination. The representatives of these facilities felt that this training course allowed their units to compensate for difficulties that sometimes arise, such as lack of immediate respiratory or laboratory technician support.

In addition to the above interviews, two initial interviews were conducted with Dr. David Harris, an endocrinologist, and Dr. Kenneth Azubuike, a neonatologist, both of St. Francis Hospital, Tulsa, Oklahoma. These gentlemen reported that level II care

has proven to be beneficial and has reduced costs at other facilities. The doctors also indicated that in many instances expectant mothers are more at ease with the knowledge that their child will be delivered at a hospital staffed to handle potential problems.

Conceptual Model

To facilitate the potential implementation of this neonatal step-down unit program, operational quidelines were established. Policies and procedures were developed for admission, transfer, and discharge for the nursery (see Appendix B) using copies of operating procedures from WHMC, WRAMC, IACH, and University Hospital of Augusta. Operating procedures were also developed for admission of infants requiring special considerations (see Appendix C).

Transportation

The Air Force C-9 transport system from Scott Air Force Base, Illinois could be used to transport level II neonate patients to EAMC. Currently, the Air Force does not charge DOD medical treatment facilities for the use of this system.

Ward Selection

In conjunction with SFC William J. Brennan, Wardmaster, Newborn Nursery, and Mr. Jack Keith, Engineer Liaison Officer, EAMC, the author conducted a

survey of room 6A-29. This room is adjacent to the current EAMC newborn nursery. The survey was conducted using the Guidelines for Perinatal Care and the Georgia Perinatal Guidelines as a reference (American Academy of Pediatrics and the American College of Obstetricians and Gynecologists (AAP/ACOG), 1992; The Georgia Department of Human Resources, 1987).

The Guidelines for Perinatal Care and the Georgia Perinatal Guidelines suggest eight electrical outlets, two oxygen outlets, two compressed air outlets, and two suction outlets per patient station. In addition, each electrical outlet should be connected to both regular and auxiliary power. The suggested floor space requirement is 4 feet between incubators/bassinets and 5 foot wide aisles.

Use of room 6A-29 would require no ward modification since it meets all of the above quidelines. Room 6A-29 is suitable for a level II nursery mission and could be used as depicted in Appendix D.

Cost Analysis

Appendix E is the cost analysis for this proposed intermediate care nursery. Since the impetus behind the establishment of the nursery was to save CHAMPUS dollars, a FASS computer run was obtained which showed

a CHAMPUS expenditure of $2,644,523 for level II neonatal care in FY 1992 (Appendix G). A description of the diagnostic related groups (DRGs) found in the FASS computer run can be found in the CHAMPUS Policy Manual, Volume II, Chapter 3 (see extract provided in Appendix J). Subtracting the $824,478 of billed institutional charges for what is normally level III care (labeled ICU/CCU on the FASS run; 31% of the total), and 31% of the total amount paid by the government for professional costs ($347,304), leaves $1,712,381 of level II neonatal care that is potentially recoverable in the EAMC region. Level I care was excluded by omitting Level I DRGs from the FASS run.

The expected CHAMPUS recovery of this proposed 4-bed Intermediate Care Nursery is $547,500 per year at 75% occupancy (Appendix F). Total start-up cost for the first year is $668,201 (Appendix E). The start-up cost includes equipment and staffing costs. The expected total costs for the first year is $120,701. Less the equipment costs of $107,966, the expected yearly CHAMPUS costs for subsequent years is $12,735.

One other issue to consider is the third party insurance collection potential of this initiative. Although third party insurance collection will

fluctuate from year to year, there is definite potential for recovery of funds. For instance the FASS system shows that $34,892 of the total amount paid by the government for neonatal care in 1992 was paid for families with other health insurance as the primary payor. In 1991 the total amount for all neonatal care was $358,849. This equates to about $243,130 in level I and II nursery charges over the two year period. The EAMC Patient Administrator estimates that 50% of billed charges are normally collected.

Since the proposed level II nursery would only operate 4 beds, the establishment of the nursery would not have a significant impact upon the hospital's respiratory therapy, laboratory, and radiology departments. The hours of coverage provided by these departments will not increase as a result of the establishment of the nursery. Also, level II RNs are capable of drawing blood to expedite laboratory requirements.

An increase in CHAMPUS costs of $60,000 was assumed, due to the need for one staff pediatrician to actively participate in running the intermediate care nursery. This workload could be provided by a CHAMPUS partner (see Appendix H).

Recommendation

EAMC should not plan for the establishment of a neonatal step-down unit program at this time. Based upon the above discussion, the establishment of such a program does not appear feasible. The occupancy rate for the unit during the first and subsequent years would need to be 91% and 77%, respectively, just to break even.

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APPENDIX A

DEFINITIONS

DEFINITIONS

High risk infants: patients born with conditions of prematurity, respiratory disorders, birth defects, fever, low blood count, or bacteria infections.

High risk obstetrical patients: patients with certain underlying medical conditions, to include, hypertension, diabetes, gestational diabetes, toxemia's, sickle cell disease, drug or alcohol abuse, or poor prenatal care. Advanced maternal age, teenage mothers, and known fetal anomalies or problems are also factors which will place a patient in this category.

Intermittent gavage feeding: interval forced feeding through a tube passed into the stomach.

Normal obstetrical patient: patients with no underlying medical problems, good prenatal care, normal laboratory studies, and no identifiable fetal problems.

Social admissions: well infants readmitted from home because of mother's medical condition.

Uncomplicated deliveries: Vaginal deliveries with no trauma or significant lacerations of the cervix.

APPENDIX B

STANDARD OPERATING PROCEDURE

XXX1

INTERMEDIATE CARE NURSERY
DWIGHT DAVID EISENHOWER ARMY MEDICAL CENTER
FORT GORDON, GEORGIA 30905-5650

Standard Operating
Procedure XXX1

SUBJECT: Admission, Transfer, and Discharge for the Intermediate Care Nursery.

1. PURPOSE: To establish guidelines for admission, transfer (in-hospital), and discharge of patients for the Intermediate Care Nursery.

2. SCOPE: This policy applies to all health care team members assigned to the Intermediate Care Nursery.

3. RESPONSIBILITY:

a. Each individual assigned to the Intermediate Care Nursery will adhere to this policy.

b. The head nurse will orient all new nursing personnel to this policy.

c. The Chief, Newborn Services will orient all medical personnel to this policy.

4. ADMISSION CRITERIA:

a. Newborn infants may be admitted directly from Labor and Delivery, the Newborn Nursery, or the Operating Room.

b. Newborns may be transferred to EAMC's Intermediate Care Nursery from other hospitals' nurseries after being accepted by the Chief, Newborn Services in consultation with the Attending Pediatrician and Intermediate Care Nursery Head Nurse.

c. Newborns may be admitted to the nursery after an "outside" delivery at home, enroute to EAMC or in the emergency room. The physician on call will be notified about the admission as soon as possible.

d. All live born infants delivered at EAMC shall be admitted to the Newborn Nursery. Initial assessment and prenatal risk evaluation shall guide subsequent placement in the

Standard Operating
Procedure XXX1
SUBJECT: Admission, Transfer, and Discharge Policy and Procedure for the Intermediate Care Nursery

Intermediate Nursery or transfer to a Level III facility. Observation of the infants clinical course guides subsequent placement prior to discharge.

e. Neonates (birth to 28 days) - May be admitted from outside the hospital with approval from the Chief, Newborn Services in coordination with the head nurse of this service or their representative. Disapproval will be based on prohibiting factors referenced in the **ADMISSION POLICY (INFANTS REQUIRING SPECIAL CONSIDERATIONS)**.

f. Social Admissions - Well infants readmitted from home because of mother's medical condition. These infants will be admitted for rooming-in with their mothers on approval by the Obstetric service in collaboration with the Postpartum Nursing Unit. The infant's care will be supervised by the Newborn Service physician and nursing staff. If the mother's condition precludes rooming-in the infant's admission to the intermediate care nursery will require approval of the Chief, Newborn Service or his/her representative in coordination with the head nurse of this service. See Policy for **ADMISSION POLICY (INFANTS REQUIRING SPECIAL CONSIDERATION)**.

g. "High risk" infants will be transferred to a Level III facility, or admitted to the Intermediate Care Nursery from the delivery room, operating room, or outside the hospital based on the level of medical nursing care required. The following are guidelines for placement of these infants:

Transfer to Level III facility

(1) Clinically unstable infants who require vital signs and continuous observation by medical and/or nursing staff.
(2) Infant requiring more than 40% oxygen by hood or any type of mechanical ventilation.
(3) Weight less than 1.5 kilogram.
(4) Infants displaying significant apnea and bradycardia.
(5) Infants in an NPO status for over 24 hours or not tolerating feedings.

Standard Operating
Procedure XXX1
SUBJECT: Admission, Transfer, and Discharge Policy and Procedure for the Intermediate Care Nursery

(6) Infants requiring parenteral nutrition or an intravenous solution greater than 10% Dextrose solution.
(7) Potential medical diagnosis for these infants include.
- Extra corporeal membrane oxygen candidates
- Infants with gestation less than 36 weeks
- Persistent respiratory distress
- Persistent hypoglycemia
- Hemolytic disease
- Drug withdrawal
- Infants of diabetic mothers
- congenital anomalies requiring close observation or surgical care
- Asphyxiated or infants with shock
- Infants with impaired neurologic status; seizures
- Cardiac disorders
- Post operative infants
- Physiologically unstable infants
- Renal complications requiring peritoneal dialysis
- Significant blood loss

Admission to Intermediate Care

(1) Transfers from Level III facilities:

- Clinically stable infants requiring vital signs every eight hours
- Infants requiring no more than 40% oxygen therapy per hood
- Weight greater than 1.5 kilograms
- No significant apnea or bradycardia requiring bagging
- Tolerating feedings
- If not tolerating feeds, not NPO greater than 24 hours
- Requiring IV therapy no greater than 10% dextrose

Standard Operating Procedure XXX1
SUBJECT: Admission, Transfer, and Discharge Policy and Procedure for the Intermediate Care Nursery

(2) Transfers from the Newborn Nursery:

- Term infants requiring 5% Dextrose IV therapy for Glucose stabilization
- Term infants requiring increased observation for sepsis and prophylactic antibiotic therapy
- Term infants with increased oxygen needs of not more than 40% per hood

h. Infants over 28 days of age will be admitted to the Intermediate Care nursery for care which cannot or is not provided in the Newborn Nursery to the degree possible for optimal patient care. These admissions must be approved by the Chief, Newborn Services or his/her representative and coordinated with the Head Nurse, Newborn Nursery. This will remain an exception rather than the rule.

i. Infants considered for admission who are suspected of potential or diagnosed infectious disease processes - refer to **ADMISSION POLICY (INFANTS REQUIRING SPECIAL CONSIDERATION).**

5. IN HOUSE TRANSFER CRITERIA:

Must be sufficiently broad to ensure optimal patient care for the entire patient population. This includes consideration of the physical environment, nursing, patient ratios, monitoring equipment and therapeutic requirements. In-house patient transfers must be fully discussed with the Chief of Service or representative and the Head nurse or representative of each unit involved prior to transfer to ensure that optimal age-specific patient care is continued until discharge.

Transfers from the Intermediate Nursery to the Newborn Nursery or to Rooming In - when vital signs are stable in an open crib, on room air, are nippling all feedings, are off intravenous fluids and have a weight of at least 1.7 kilograms. Oral medications, intravenous antibiotics, phototherapy for bilirubin less than 20mg/dl, pending consultations or diagnostic procedures are not contraindications for transfer to the Newborn Nursery if other criteria are met.

Standard Operating
Procedure XXX1
SUBJECT: Admission, Transfer, and Discharge Policy and Procedure for the Intermediate Care Nursery

Transfer to the Pediatric Ward - May be considered for patients greater than 1 week of age and who do not require intensive care monitoring or support.

Transfer to the Pediatric Intermediate Care Unit - May be considered for patients greater than 28 days of age who require intermediate care. The motivation for these transfers may be the need for bed space for neonates born in this facility or transferred from other hospitals.

6. DISCHARGE CRITERIA:

a. Discharge from the Newborn/Intermediate care nurseries are allowed when the following criteria are fully met:

(1) Adequate feedings have been demonstrated when administered by the primary care taker or the method of feeding can be administered at the receiving medical facility.

(2) The infant is thermostable in an open crib or the receiving medical facility has the capability of continuing mechanical thermoregulatory support.

(3) All age-specific care requirements can be feasibly given at home or the receiving medical facility and any equipment required has been secured with appropriate operational instructions given to the care-giver.

(4) After psychosocial needs as well as a safe discharge environment have been addressed and issues that require further resolution have been referred to the appropriate agency for follow-up.

(5) Discharge physical, discharge instructions, discharge orders, discharge medications/equipment have all been completed or arranged.

(6) Follow-up care is ensured and possible for the family.

(7) Appropriate referrals have been arranged and reviewed with the family/care-giver.

DEPARTMENT OF NURSING
DWIGHT DAVID EISENHOWER ARMY MEDICAL CENTER
FORT GORDON, GEORGIA 30905-5650

SOP# XXX1

APPROVED BY CLINICAL HEAD NURSE

_____

_____

_____

APPROVED BY CHIEF, NEWBORN SERVICES

_____

_____

_____

APPENDIX C

STANDARD OPERATING PROCEDURE

XXX2

INTERMEDIATE CARE NURSERY
DWIGHT DAVID EISENHOWER ARMY MEDICAL CENTER
FORT GORDON, GEORGIA 30905-5650

Standard Operating
Procedure XXX2

SUBJECT: Admission of Infants Requiring Special Consideration

1. PURPOSE: To establish a policy for the admission of those infants who require special consideration. To provide guidance for medical and nursing staff members in the categories of infant who may be admitted to the ward from sources outside EAMC and/or require implementation of precautions to prevent risk to other infants on the ward.

2. SCOPE: This policy applies to all medical and nursing staff assigned to the Intermediate Care Nursery. The Intermediate Care Nursery does not have an isolation room. This policy is to ensure that patients with known or suspected communicable or infectious disease and/or requiring protective isolation will be appropriately placed at EAMC. Appropriate placement will include isolation required and age-specific medical nursing care.

3. RESPONSIBILITY:

a. Each individual assigned to the Intermediate Care Nursery will familiarize themselves with this policy.

b. The Head Nurse or Wardmaster will orient new nursery staff to this policy.

c. The Chief, Newborn Service will orient all medical staff to this policy.

4. GENERAL:

a. The following categories of infants may be admitted or readmitted to the Intermediate Care Nursery after special consideration and approval of the Chief, Newborn Services or his/her representative.

(1) Infants born under "unsterile" conditions (ie. mothers with suspected o_ proved infections, or out of hospital deliveries).

(2) Infants transferred from another hospital's newborn service.

(3) Infants readmitted after discharge.

Standard Operating
Procedure XXX2
SUBJECT: Admission of Infants Requiring Special Consideration

b. Infants, in category a. will be admitted using the routine intermediate care nursery admission policy. As with any infant admitted to the nursery, "universal precautions", to include good hand washing technique, will be instituted.

c. Infants in category b. & c. will be considered on a case by case basis. The following are to be considered, but are not all inclusive:

(1) staffing: patient ratio/acuity

(2) availability of beds

(3) availability of required medical specialist (ie. pediatric surgeon, cardiologist, ect.)

(4) availability of required support equipment/supplies (ie. HFV, Ventilators, etc.)

(5) suspected or known infecting organism

(6) the Intermediate Care Nursery does not have a designated isolation room

d. Infants in category b. & c. with a known or suspected infecting organism will be admitted to EAMC in a manner that will not jeopardize the health of infants with immature immune systems in the nursery. The following will be the stages of all admissions of this nature:

(1) If intermediate care is not required, the infant will be admitted to the pediatric unit.

(2) If intermediate care is required, the infant will be admitted to the pediatric intermediate unit. Medical management will be the responsibility of the Pediatric Department.

(3) If the infant is harboring a known organism that requires no more than the standard universal precautions and meets all other admission criteria (ref. Admission, Transfer, and Discharge Policy), the infant may be admitted to the Intermediate Care Nursery if approved by the Chief, Newborn Services.

DEPARTMENT OF NURSING
DWIGHT DAVID EISENHOWER ARMY MEDICAL CENTER
FORT GORDON, GEORGIA 30905-5650

SOP# XXX2

APPROVED BY CLINICAL HEAD NURSE

_____

_____

_____

APPROVED BY CHIEF, NEWBORN SERVICES

_____

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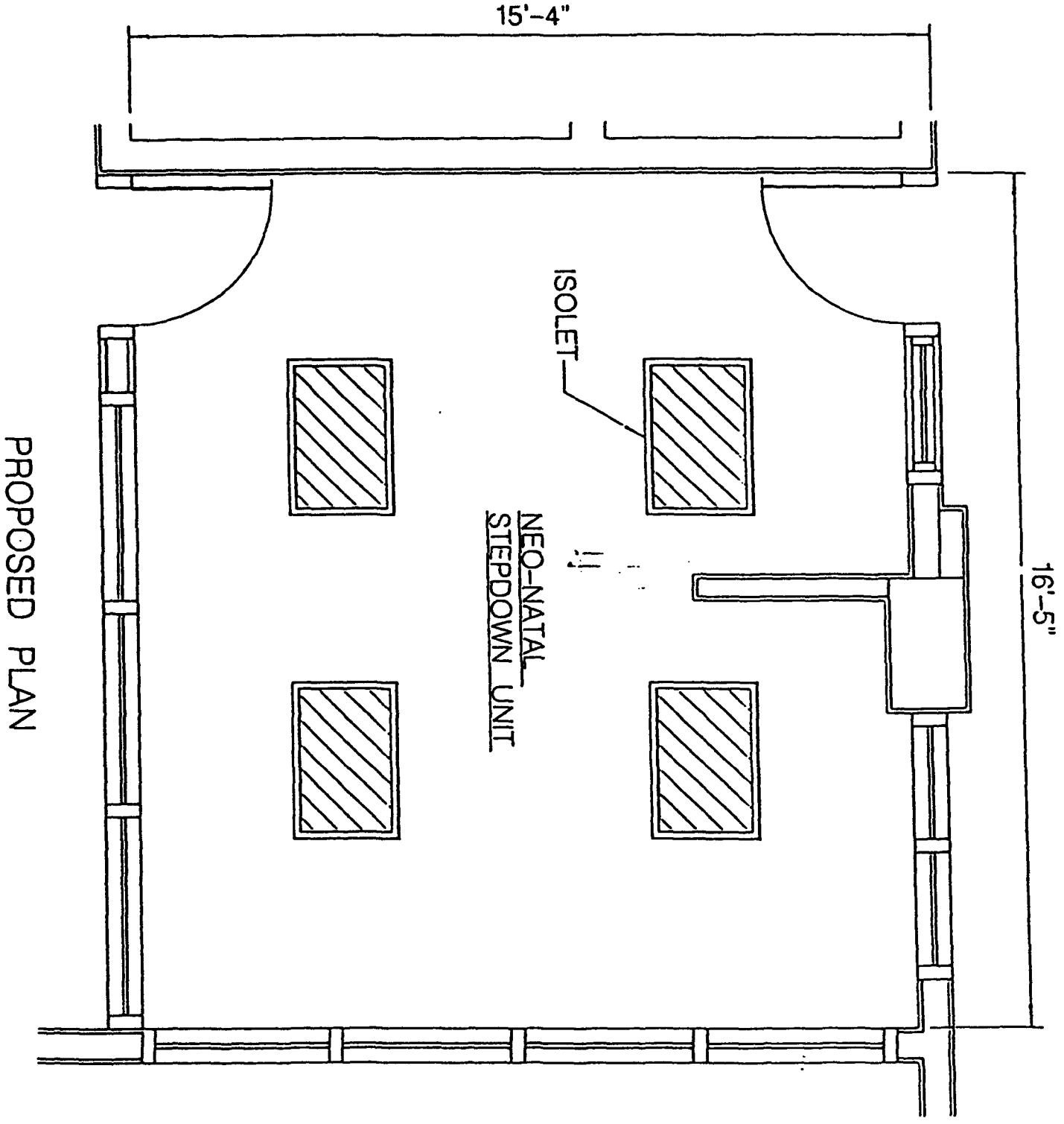
APPENDIX D

NEONATAL STEP-DOWN UNIT

DIAGRAM


15'-4"
ISOLET
NEO-NATAL
STEPDOWN UNIT
16'-5"
PROPOSED PLAN

APPENDIX E

DETAILED COST ANALYSIS

EAMC REGION

NEONATAL STEP-DOWN UNIT

Detailed Cost Analysis - EAMC Region - Neonatal Step-down Unit

1. Potentially recoverable Level II costs in the EAMC Region (page 17): $1,712,381

2. Expected recoverable CHAMPUS cost (Appendix F): $547,500

Medical Treatment Facility (MTF) Impact: Cost to MTF to begin service.

3. *Expected Increase: 54 neonatal level II admissions

4. Salaries of Intermediate Care Nursery Staff (Appendix H)
   $500,235 + $60,000 = $560,235

5. Supplies and Equipment Costs (Appendix I): $107,966

6. Ward Modifications: 0

7. Total MTF Cost (lines 4+5+6): $668,201

8. Total expected savings (costs):

(line 2 - line 7) First Year	(line 2 - line 4) Second Year
($120,701)	($12,735)

* 54 admissions equate to approximately 31% of the 174 regional Level II neonatal cases. (See Appendix G)

APPENDIX F

EXPECTED RECOVERABLE CHAMPUS COSTS

EXPECTED RECOVERABLE CHAMPUS COSTS

Average Intermediate Care Nursery bed days is 20 days.

365/20 = 18.25, thus each intermediate care bassinet has a capacity of approximately 18.25 neonates per year.

18.25 x 4 bassinets x 20 bed days = 1,460 available bed days per year

$500 average daily intermediate care cost x 1,460 available bed days = $730,000.

* Average occupancy rate for Intermediate Care Nursery is 75%. 75% of $730,000 is $547,500.

* Occupancy rates of the Level II nursery units at WRAMC, IACH, and University Hospital currently average 75%.

APPENDIX G

FINANCIAL ANALYSIS SUPPORT SYSTEM

EAMC AND REGIONAL MTFs

EISENHOWER ARMY MEDICAL CENTER
AND REGIONAL MTF'S

NEONATAL CASES

SCAL YR	DRG	PROVIDER ID	DATE OF ADMIN	DATE OF DISCHARGE	TOTAL AMT PAID BY GOVT FOR ENTIRE ENCOUNTER	TOTAL AMT PAID BY GOVT FOR ALL PROF SERVICES	GOVT PAID TOTAL INST	TOTAL AMT BILLED FOR ALL INST SERVICES	BILLED INST NURSERY CHARGES	BILLED INST ICU/CCU CHARGES	BED DAYS	BEN FIC CAT GRY	PATIENT ID
Fox AH Redstone Arsenel													
92	627	610711167	03/25/92	03/29/92	3177	694	2483	5958	160	900	4	1	308958301
92	619	630845288	05/26/92	06/03/92	4170	126	4044	5982	3872	0	8	1	310848725
92	618	630845288	02/03/92	02/24/92	22631	4933	17698	27357	9680	5094	29	1	318142374
92	626	630845288	10/05/91	10/14/91	11172	1473	9699	8453	2420	2264	9	1	325317057
92	607	630845288	06/11/92	07/03/92	31591	61	31530	24092	18484	566	39	1	349074949
92	618	630845288	05/28/92	06/02/92	7780	1226	6553	5425	1452	1132	5	1	352767224
92	617	610711167	03/21/92	04/17/92	11178	0	11178	34796	0	8100	27	1	354651393
92	612	630845288	06/22/92	07/20/92	14577	2193	12384	37502	16275	0	28	1	356325306
92	627	630845288	07/28/92	08/06/92	2664	25	2639	11139	4325	0	9	1	359342568
Subtotal **					108941	10731	98209	160704	56668	18056	158		

EISENHOWER ARMY MEDICAL CENTER
AND REGIONAL MTF'S

NEONATAL CASES

CAL R	DRG	PROVIDER ID	DATE OF ADMIN	DATE OF DISCHARGE	TOTAL AMT PAID BY GOVT FOR ENTIRE ENCOUNTER	TOTAL AMT PAID BY GOVT FOR ALL PROF SERVICES	GOVT PAID TOTAL INST	TOTAL AMT BILLED FOR ALL INST SERVICES	BILLED INST NURSERY CHARGES	BILLED INST ICU/CCU CHARGES	BED DAYS	BEN FIC CAT GRY	PATIENT ID
Noble AH Ft McClellan													
2	607	630312913	12/17/91	01/14/92	27705	6740	20965	34482	24645	0	28	1	323874756
2	626	430654870	01/23/92	03/05/92	88145	6498	81647	184950	0	16030	42	1	325647213
2	627	630312913	12/29/91	01/06/92	4656	1922	2734	13504	3040	0	8	1	325986867
2	607	630312913	11/28/91	01/07/92	32461	918	31543	76146	35200	0	40	1	337678310
2	612	630312913	04/15/92	05/06/92	15335	3850	11485	30639	18480	0	21	1	348580314
2	613	630312913	12/15/91	01/03/92	16383	3837	12546	29076	16720	0	19	1	357432261
Subtotal **					184686	23766	160919	368796	98085	16030	158		

EISENHOWER ARMY MEDICAL CENTER
AND REGIONAL MTF'S

NEONATAL CASES

AL	DRG	PROVIDER ID	DATE OF ADMIN	DATE OF DISCHARGE	TOTAL AMT PAID BY GOVT FOR ENTIRE ENCOUNTER	TOTAL AMT PAID BY GOVT FOR ALL PROF SERVICES	GOVT PAID TOTAL INST	TOTAL AMT BILLED FOR ALL INST SERVICES	BILLED INST NURSERY CHARGES	BILLED INST ICU/CCU CHARGES	BEN FIC BED DAYS	CAT GRY	PATIENT ID
Lyster AH Ft Rucker													
2	627	636005396	02/08/92	02/13/92	3963	961	3002	9547	0	6960	5	1	322866850
2	611	590634434	02/02/92	02/21/92	21291	2888	18403	14841	6215	5008	19	1	336358512
2	626	581685139	08/22/92	08/27/92	9447	17	9430	6548	3000	0	5	1	342390150
2	611	590634434	02/03/92	02/22/92	28779	6463	22317	30258	13560	8764	38	1	343121487
Subtotal **					63480	10329	53151	61194	22775	20732	67		

EISENHOWER ARMY MEDICAL CENTER
AND REGIONAL MTF'S

NEONATAL CASES

CAL R	DRG	PROVIDER ID	DATE OF ADMIN	DATE OF DISCHARGE	TOTAL AMT PAID BY GOVT FOR ENTIRE ENCOUNTER	TOTAL AMT PAID BY GOVT FOR ALL PROF SERVICES	GOVT PAID TOTAL INST	TOTAL AMT BILLED FOR ALL INST SERVICES	BILLED INST NURSERY CHARGES	BILLED INST ICU/CCU CHARGES	BED DAYS	BEN FIC CAT GRY	PATIENT ID
Eisenhower Army Medical Center													
12	622	586002053	03/13/92	04/08/92	60862	5145	55717	107602	0	19080	26	1	323845934
12	618	586002053	01/24/92	02/07/92	15523	2275	13248	16997	7465	1590	23	1	325929900
12	616	586002053	01/25/92	02/14/92	27210	2498	24712	57950	3715	7155	20	1	325996435
12	627	586002053	01/15/92	01/23/92	4251	874	3377	9050	0	6360	8	1	331484456
12	621	586002053	02/28/92	03/04/92	1817	353	1464	2961	1670	0	5	1	342484341
12	614	586002053	02/26/92	03/05/92	5222	224	4999	4704	3000	0	8	1	346117778
12	627	586002053	02/14/92	02/29/92	7311	1803	5508	25608	0	1500	15	1	348292421
12	626	586002053	02/05/92	02/09/92	12345	157	12188	10769	0	3180	4	1	354292011
12	607	586002053	05/03/92	05/10/92	25891	0	25891	10513	0	5565	7	1	354525703
Subtotal **					160433	13329	147103	246155	15850	44430	116		

EISENHOWER ARMY MEDICAL CENTER
AND REGIONAL MTF'S

NEONATAL CASES

AL	DRG	PROVIDER ID	DATE OF ADMIN	DATE OF DISCHARGE	TOTAL AMT PAID BY GOVT FOR ENTIRE ENCOUNTER	TOTAL AMT PAID BY GOVT FOR ALL PROF SERVICES	GOVT PAID TOTAL INST	TOTAL AMT BILLED FOR ALL INST SERVICES	BILLED INST NURSERY CHARGES	BILLED INST ICU/CCU CHARGES	BED DAYS	BEN FIC GRY	PATIENT ID
Martin AH Ft Benning													
2	626	580572412	10/15/91	10/20/91	17161	1021	16140	6466	0	1560	5	1	301054754
2	611	576000722	10/24/91	11/04/91	29015	1002	28013	16956	6342	4500	11	1	308460709
2	626	580572412	01/15/92	02/21/92	44842	2844	41998	58837	0	3540	37	1	308652963
2	627	141338307	01/02/92	01/12/92	6221	2507	3714	17314	4800	5525	10	1	311160961
2	607	581685139	03/28/92	04/22/92	22089	2139	19949	26974	15000	0	25	1	324121127
2	621	581685139	07/24/92	07/28/92	1132	0	1132	2249	780	0	4	1	324698835
2	612	581685139	10/07/91	10/24/91	17911	2618	15293	36444	5400	4800	17	1	324839207
2	623	580572412	05/18/92	05/27/92	22764	5696	17068	21762	0	3440	9	1	325041249
2	612	581954432	06/25/92	07/24/92	32581	1324	31256	75655	5665	16986	29	1	325753267
2	614	581685139	06/24/92	06/28/92	4367	500	3867	2591	1185	0	4	1	326135875
2	607	581685139	03/27/92	05/08/92	46655	6756	39899	80911	22800	25200	80	1	326615478
2	627	581685139	10/22/91	10/31/91	2627	0	2627	6007	0	0	9	1	335772046
2	626	381360529	04/24/92	05/01/92	13772	1627	12145	17657	0	6685	7	1	338476374
2	623	581685139	11/04/91	11/13/9	13809	3834	9976	12357	0	3000	9	1	342082579
2	622	580572412	02/06/92	02/15/92	45606	10559	35048	37355	0	7640	9	1	342088929
2	626	580572412	02/20/92	03/01/92	17206	1111	16095	20505	0	8120	10	1	342088929
2	614	581685139	11/12/91	11/19/91	4555	688	3867	2296	1770	0	7	1	342192031
2	626	581954432	01/24/92	04/07/92	81293	10216	71077	139224	40239	16092	74	1	342711011
2	627	581685139	10/05/91	10/11/91	3436	810	2626	10707	3600	0	6	1	343645675
2	626	580572412	10/13/91	10/22/91	17359	1255	16104	32050	0	12105	9	1	343925279
2	607	581685139	10/22/91	11/23/91	29455	4980	24475	60798	19200	0	32	1	343925279
2	626	720408982	01/25/92	02/21/92	51175	1212	49963	99968	0	17010	27	1	345151563
2	627	581685139	03/27/92	04/09/92	3806	1193	2613	19163	0	6000	13	1	346333776
2	622	581685139	05/10/92	05/19/92	23592	3125	20467	14898	5400	0	9	1	349584824
2	613	581685139	12/02/91	12/08/91	7724	962	6763	12728	3600	0	6	1	349870764
2	611	581685139	09/26/91	10/07/91	15621	1753	13868	13202	6600	0	11	1	350390473
2	611	581685139	03/09/92	03/25/92	20095	2416	17679	31604	9600	0	16	1	350508556
2	614	581685139	09/30/91	10/11/91	4737	1041	3696	8223	6600	0	11	1	350856834
2	614	581954432	07/10/92	08/01/92	4240	136	4104	19489	11258	894	22	1	352192796
2	626	581954432	01/04/92	01/15/92	11556	1206	10350	13007	6031	894	11	1	355033584
2	619	581685139	12/08/91	12/13/91	4561	594	3967	2326	1380	0	5	3	357208447
2	627	581685139	02/18/92	02/22/92	3295	682	2613	3465	0	600	4	1	357621888
2	618	581685139	09/29/91	10/03/91	6191	0	6191	6118	0	2400	4	1	357698095
2	619	581954432	04/21/92	04/28/92	5389	1041	4349	8257	3608	0	7	1	358285356
Subtotal **					635841	76849	558993	937563	180858	178491	549		

Neonatal Step-down Unit

EISENHOWER ARMY MEDICAL CENTER
AND REGIONAL MTF'S

NEONATAL CASES

FISCAL YEAR	DRG	PROVIDER ID	DATE OF ADMIN	DATE OF DISCHARGE	TOTAL AMT PAID BY GOVT FOR ENTIRE ENCOUNTER	TOTAL AMT PAID BY GOVT FOR ALL PROF SERVICES	GOVT PAID TOTAL INST	TOTAL AMT BILLED FOR ALL INST SERVICES	BILLED INST NURSERY CHARGES	BILLED INST ICU/CCU CHARGES	BED DAYS	BEN FIC CAT GRY	PATIENT ID
** Winn AH Ft Stewart													
1992	621	311126469	07/16/92	07/23/92	2049	801	1248	7370	0	3644	7	1	301848799
1992	627	580568702	12/26/91	01/01/92	3349	811	2539	3764	0	0	6	1	306260665
1992	627	580593388	01/08/92	01/13/92	2738	481	2258	3412	220	1720	5	1	307454558
1992	626	311126469	06/21/92	06/28/92	11311	1008	10304	18702	0	1822	7	1	307656539
1992	607	311126469	02/21/92	04/03/92	21675	150	21525	55887	0	8199	42	1	307860744
1992	626	311126469	11/07/91	11/18/91	12380	2112	10268	19926	0	3360	11	1	311264662
1992	613	580593388	10/17/91	11/12/91	6841	997	5843	13575	0	10660	26	1	311368983
1992	614	580568702	06/09/92	06/22/92	4446	765	3681	3980	3380	0	13	1	314560623
1992	626	311126469	10/02/91	10/09/91	11279	976	10304	8226	0	840	7	1	314742061
1992	626	311126469	12/29/91	01/30/92	27614	452	27162	53813	0	18975	32	1	314966434
1992	626	581091080	05/06/92	05/11/92	11196	1628	9569	9173	0	2930	5	1	315664795
1992	627	580568702	01/14/92	01/24/92	3249	746	2503	7214	4250	0	10	1	316056317
1992	616	311126469	01/14/92	03/30/92	130114	16442	113671	202930	0	25508	76	1	321060093
1992	627	311126469	04/30/92	05/06/92	3654	842	2811	6069	0	0	6	1	321506527
1992	627	311126469	01/11/92	01/15/92	3047	207	2840	1376	0	0	4	1	323196239
1992	626	311126469	01/26/92	01/30/92	11441	1138	10304	4724	0	911	4	1	324751697
1992	627	580568702	12/19/91	12/23/91	2540	0	2540	1430	880	0	4	1	324915246
1992	621	311126469	06/30/92	07/11/92	7354	2015	5339	12461	0	4122	22	1	325031787
1992	621	580568702	12/06/91	12/10/91	1519	432	1087	1570	880	0	4	1	325041380
1992	627	311126469	12/16/91	12/20/91	3574	734	2840	1743	0	0	4	1	325127219
1992	626	311126469	11/21/91	12/01/91	12679	2402	10277	23936	1260	5880	10	1	325149137
1992	627	580593388	10/27/91	11/02/91	2922	664	2258	4294	210	2050	6	1	325382068
1992	613	311126469	04/10/92	04/27/92	8412	1122	7290	12572	0	0	17	1	325606769
1992	626	311126469	10/14/91	10/21/91	11686	1409	10277	20026	0	5880	7	1	325747690
1992	607	311126469	03/28/92	04/16/92	21115	886	20229	14818	0	911	19	1	325847060
1992	607	580568702	04/16/92	04/27/92	20153	664	19489	5457	4675	0	11	1	325847060
1992	627	311126469	07/23/92	07/31/92	3793	959	2834	18544	0	5466	8	1	325872273
1992	619	311126469	04/19/92	04/29/92	4720	433	4287	5171	0	0	10	1	326589603
1992	621	311126469	12/26/91	01/06/92	1816	646	1170	8389	0	0	11	1	326657556
1992	614	311126469	08/09/92	08/14/92	3133	294	2839	7091	0	1822	5	1	327482399
1992	612	311126469	11/14/91	11/29/91	15528	3653	11875	26065	4200	4200	15	1	327672557
1992	627	580568702	05/10/92	05/21/92	2494	0	2494	8882	0	0	11	1	328574283
1992	613	311126469	06/06/92	06/21/92	7708	400	7308	16220	0	2733	15	1	330266500
1992	614	311126469	07/14/92	07/25/92	4928	738	4190	7873	0	911	11	1	332254807
1992	621	311126469	05/23/92	05/27/92	1536	319	1217	4438	0	911	4	1	334554761
1992	627	580593388	04/24/92	04/28/92	868	126	742	2053	880	0	4	1	335958122
1992	626	580568702	01/04/92	01/11/92	11279	2083	9196	4474	2975	0	7	1	340821983
1992	626	311126469	02/12/92	04/05/92	44652	5901	38751	48521	23816	911	53	1	341423202
1992	614	311126469	10/30/91	11/05/91	3806	414	3393	4409	0	0	6	1	341811961
1992	613	311126469	11/19/91	11/29/91	7399	132	7267	5347	4200	0	10	1	342013580
1992	613	311126469	11/19/91	11/28/91	9314	1979	7335	4394	3580	0	9	1	342013580

Neonatal Step-down Unit

EISENHOWER ARMY MEDICAL CENTER
AND REGIONAL MTF'S

NEONATAL CASES

FISCAL YEAR	DRG	PROVIDER ID	DATE OF ADMIN	DATE OF DISCHARGE	TOTAL AMT PAID BY GOVT FOR ENTIRE ENCOUNTER	TOTAL AMT PAID BY GOVT FOR ALL PROF SERVICES	GOVT PAID TOTAL INST	TOTAL AMT BILLED FOR ALL INST SERVICES	BILLED INST NURSERY CHARGES	BILLED INST ICU/CCU CHARGES	BED DAYS	BEN FIC CAT GRY	PATIENT ID
1992	627	586000433	01/21/92	02/05/92	3278	1008	2270	8882	3100	0	15	1	342506784
1992	607	311126469	02/06/92	02/11/92	5429	93	5336	4308	0	0	5	1	343513429
1992	607	580593388	02/11/92	02/28/92	15428	1064	14364	8523	0	7310	17	1	343513429
1992	613	581091080	04/17/92	04/22/92	6888	19	6870	5031	0	2680	5	1	343931248
1992	618	580593388	06/03/92	06/25/92	8634	3027	5608	21435	220	9030	22	1	344770203
1992	626	311126469	11/26/91	12/04/91	11704	1437	10268	15900	1900	2520	8	1	345173380
1992	623	311126469	07/21/92	07/29/92	13106	2158	10948	13912	0	4555	8	1	346735994
1992	626	581581103	08/31/91	11/08/91	66274	12940	53334	102740	13470	29250	69	1	348580863
1992	627	311126469	12/15/91	12/24/91	5045	2261	2784	16548	1300	3360	9	1	349790017
1992	626	311126469	10/20/91	10/30/91	13782	2358	11424	28288	0	6720	10	1	351064739
1992	621	581034851	12/10/91	12/23/91	10872	2554	8318	12285	226	7219	15	1	354282503
1992	619	311126469	03/23/92	03/31/92	4526	221	4305	5311	0	0	8	1	356975983
1992	613	580568702	03/31/92	04/07/92	7795	1217	6578	3989	0	0	7	1	356975983
1992	627	580568702	05/16/92	05/21/92	3716	1195	2521	3572	2125	0	5	1	358464502
1992	607	311126469	11/26/91	01/01/92	26469	4891	21578	32404	14280	1680	36	1	358905335
1992	627	580593388	10/09/91	10/19/91	2258	0	2258	5689	630	2870	10	1	358920393
1992	607	581034851	03/06/92	04/30/92	28995	312	28683	40732	0	26726	55	1	359412884
** Subtotal **					715510	94716	620795	1019871	92657	218286	848		

Neonatal Step-down Unit

50

EISENHOWER ARMY MEDICAL CENTER
AND REGIONAL MTF'S

NEONATAL CASES

FISCAL YEAR	DRG	PROVIDER ID	DATE OF ADMIN	DATE OF DISCHARGE	TOTAL AMT PAID BY GOVT FOR ENTIRE ENCOUNTER	TOTAL AMT PAID BY GOVT FOR ALL PROF SERVICES	GOVT PAID TOTAL INST	TOTAL AMT BILLED FOR ALL INST SERVICES	BILLED INST NURSERY CHARGES	BILLED INST ICU/CCU CHARGES	BED DAYS	BEN FIC CAT GRY	PATIENT ID
** Blanchfield AH Ft Campbell													
1992	619	620476822	10/16/91	10/22/91	6336	459	5877	2957	760	0	6	1	313962004
1992	614	626002627	11/08/91	11/25/91	10212	924	9288	18986	13770	0	34	1	315462621
1992	627	626002627	02/17/92	02/28/92	3002	716	2286	9647	4570	0	11	1	317740701
1992	627	620476822	03/31/92	04/08/92	8058	4241	3817	11122	0	6600	8	1	318466146
1992	621	620476822	02/14/92	02/28/92	4342	2193	2149	10373	1330	5175	14	1	322433092
1992	627	626002627	11/06/91	11/15/91	5279	3002	2277	4961	3240	0	9	1	325721210
1992	626	620521201	10/07/91	10/15/91	11481	1223	10259	6716	680	3220	8	1	327962942
1992	607	620476822	11/19/91	11/27/91	30539	894	29645	7733	0	5550	8	1	329256443
1992	607	626002627	11/27/91	12/26/91	20646	2904	17741	15072	11745	0	29	1	329256443
1992	626	620476822	12/04/91	12/10/91	24005	4034	19971	14736	0	8400	12	1	330562429
1992	612	620476822	10/05/91	10/14/91	12095	1634	10461	12869	0	7425	9	3	332966318
1992	619	620476822	08/08/92	08/15/92	6906	634	6273	1316	950	0	7	1	336796452
1992	621	620476822	10/21/91	11/01/91	13213	1559	11654	7188	1710	2850	15	1	339678031
1992	627	620476822	01/19/92	01/25/92	4943	1108	3835	5534	0	1745	6	3	340023639
1992	627	620476822	10/18/91	10/28/91	5679	1853	3826	9453	1140	3300	10	1	341325066
1992	623	620476822	11/01/91	11/14/91	20383	5653	14730	26288	0	3	13	1	342211750
1992	621	610482973	03/12/92	03/16/92	1874	465	1409	2144	1840	0	8	1	342639953
1992	627	626002627	04/06/92	04/11/92	2746	459	2287	3730	1711	0	5	1	343051646
1992	618	620476822	01/01/92	01/06/92	10266	1430	8835	8862	0	4125	5	1	343774657
1992	626	620476822	11/15/91	11/28/91	17288	3343	13944	27211	0	9825	13	1	345671209
1992	616	620476822	01/10/92	02/01/92	30104	1847	28257	31490	0	15450	22	1	346441906
1992	627	610482973	02/19/92	02/23/92	2595	262	2333	1267	920	0	4	1	347784459
1992	613	620476822	01/21/92	01/28/92	17589	3682	13907	20842	0	10050	14	1	348308742
1992	627	626002627	12/27/91	12/31/91	2782	450	2333	5663	1620	0	4	1	348874315
1992	607	620476822	11/22/91	12/30/91	37858	8482	29376	42227	0	26400	38	1	351070175
1992	607	620476822	04/04/92	04/10/92	31036	1373	29663	5581	570	2475	6	1	352321623
1992	614	626002627	01/07/92	01/15/92	8654	1333	7321	15781	8592	0	16	1	352541933
1992	607	620476822	10/04/91	11/06/91	36828	7407	29421	38295	0	23925	33	1	352757331
1992	619	620476822	04/21/92	04/27/92	6585	708	5877	3593	760	0	6	1	352773895
1992	619	620476822	03/26/92	04/05/92	13971	8129	5841	17836	0	7650	10	1	354492451
1992	614	610482973	01/10/92	01/20/92	3824	398	3427	2832	2300	0	10	1	355541315
1992	619	626002627	12/28/91	01/01/92	5961	1106	4855	6478	2360	0	8	1	356125882
1992	626	610703799	02/01/92	02/29/92	69039	7224	61815	134770	0	0	28	1	356604859
1992	623	620476822	02/12/92	02/20/92	18967	4192	14775	10823	0	1055	8	1	357299532
1992	627	610482973	02/05/92	02/10/92	2634	302	2333	1818	1150	0	5	1	357299532
1992	612	620476822	04/04/92	04/21/92	20452	4314	16138	22570	0	12375	17	1	359512606
** Subtotal **													
					528172	89937	438235	568765	61718	157598	459		

Neonatal Step-down Unit

EISENHOWER ARMY MEDICAL CENTER
AND REGIONAL MTF'S

NEONATAL CASES

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** Moncrief AH Ft Jackson													
1992	607	570339444	12/25/91	02/24/92	69455	9369	60086	144307	0	46500	61	1	301838447
1992	614	570339444	05/15/92	05/29/92	4033	148	3886	10344	0	775	14	1	322480021
1992	623	570339444	10/24/91	11/25/91	35217	939	34278	79872	0	24800	32	1	322827030
1992	627	570339444	10/03/91	10/18/91	11235	2302	8933	34094	0	10850	15	1	325117275
1992	626	570339444	12/26/91	01/01/92	10110	422	9688	8973	300	3100	6	1	325143472
1992	621	570339444	02/06/92	02/17/92	6375	1320	5054	17088	600	10075	15	1	326273083
1992	627	570339444	10/16/91	10/20/91	3000	333	2667	1687	1200	0	4	1	326960799
1992	627	570339444	01/17/92	01/26/92	3856	1218	2638	12558	300	6200	9	1	327460560
1992	621	570339444	01/22/92	01/26/92	1510	368	1142	1536	1200	0	4	1	328274755
1992	613	570339444	02/04/92	02/27/92	11005	2172	8833	25957	0	17050	23	1	331280416
1992	619	860492210	05/18/92	05/28/92	6662	0	6662	16301	0	14000	10	1	331670985
1992	616	570339444	01/22/92	01/26/92	20040	368	19672	1714	900	0	4	1	338480794
1992	627	576000276	05/29/92	06/10/92	4402	1206	3196	23788	4800	3860	12	1	340821959
1992	607	576000276	10/14/91	11/15/91	2534	2534	0	29386	18295	965	32	1	346304721
1992	618	576000276	02/20/92	02/28/92	9104	1145	7959	8061	4495	0	8	1	349768289
1992	626	576000276	05/14/92	06/16/92	41374	1335	40038	93621	9600	16405	33	1	352329664
1992	614	570339444	12/29/91	01/06/92	4637	698	3939	9548	0	6200	8	1	353558746
1992	627	570339444	02/28/92	03/12/92	2913	1768	1145	23222	0	10075	13	3	356188714
** Subtotal **					247461	27647	219814	542060	41690	170855	303		
*** Total ***					2644523	347304	2297220	3905108	570301	824478	2658		

APPENDIX H

PERSONNEL REQUIREMENTS

Personnel Requirements:

Personnel	Cost/Individual*	Total/Cost
1 Captain (AN)	$69,215	$69,215
1 SFC (91C)	$44,955	$44,955
5 Neonatal Nurses (GS11)	$51,901	$259,505
5 LPNs (GS5)	$28,312	$126,560
	Total	$500,235
Assumption of an increase in CHAMPUS due to one pediatrician's increased participation in the intermediate care nursery. 20 clinic days/month x 10 Partnership CHAMPUS visits/day x 12 months x $25/visit = $60,000.	--	60,000
		$560,235

* These rates are from the FY 93 Army Composite Standard Rate Schedule.

APPENDIX I

EQUIPMENT/SUPPLY COSTS

APPENDIX I

EQUIPMENT/SUPPLY COSTS

Equipment/Supply Costs:

Item	Cost*	Quantity	Total
Incubator	$9,860	4	$39,440
Infusion Pump	$2,200	4	$ 8,800
Cardiopulmonary monitor	$7,870	4	$31,480
Phototherapy Units	$1,200	3	$ 3,600
Pulse Oximeter	$2,325	4	$ 9,300
Syringe Pumps	$2,000	2	$ 4,000
Neonatal Scale	$1,800	1	$ 1,800
Oxygen Blenders	$ 890	2	$ 1,780
Premie-t-shirts (Gross)	$ 504	2	$ 1,008
Expendable supplies **			$ 6,758
		Total	$107,966

* Costs are listed at current market prices.

** Subject matter experts on the Gateway-to-Care Steering Committee estimated that supplies needed to maintain four level II infants for 30 days was approximately $563.20 above present nursery costs. This equates to $6,758.40 per year.

APPENDIX J

DRG DESCRIPTIONS

DRG# Description

600 NEONATE, DIED W/IN ONE DAY OF BIRTH

601 NEONATE, TRANSFERRED <5 DAYS OLD

602 NEONATE, BIRTHWT <750G, DISCHARGED ALIVE

603 NEONATE, BIRTHWT <750G, DIED

604 NEONATE, BIRTHWT 750-999G, DISCHARGED ALIVE

605 NEONATE, BIRTHWT 750-999G, DIED

606 NEONATE, BIRTHWT 1000-1499G, W SIGNIF OR PROC, DISCHARGED ALIVE

607 NEONATE, BIRTHWT 1000-1499G, W/O SIGNIF OR PROC, DISCHARGED ALIV

608 NEONATE, BIRTHWT 1000-1499G, DIED

609 NEONATE, BIRTHWT 1500-1999G, W SIGNIF OR PROC, W MULT MAJOR PROB

610 NEONATE, BIRTHWT 1500-1999G, W SIGNIF OR PROC, W/O MULT MAJOR PR

611 NEONATE, BIRTHWT 1500-1999G, W/O SIGNIF OR PROC, W MULT MAJOR PR

612 NEONATE, BIRTHWT 1500-1999G, W/O SIGNIF OR PROC, W MAJOR PROB

613 NEONATE, BIRTHWT 1500-1999G, W/O SIGNIF OR PROC, W MINOR PROB

614 NEONATE, BIRTHWT 1500-1999G, W/O SIGNIF OR PROC, W OTHER PROB

615 NEONATE, BIRTHWT 2000-2499G, W SIGNIF OR PROC, W MULT MAJOR PROB

616 NEONATE, BIRTHWT 2000-2499G, W SIGNIF OR PROC, W/O MULT MAJOR PR

617 NEONATE, BIRTHWT 2000-2499G, W/O SIGNIF OR PROC, W MULT MAJOR PR

618 NEONATE, BIRTHWT 2000-2499G, W/O SIGNIF OR PROC, W MAJOR PROB

619 NEONATE, BIRTHWT 2000-2499G, W/O SIGNIF OR PROC, W MINOR PROB

620 NO LONGER VALID

621 NEONATE, BIRTHWT 2000-2499G, W/O SIGNIF OR PROC, W OTHER PROB

622 NEONATE, BIRTHWT >2499G, W SIGNIF OR PROC, W MULT MAJOR PROB

623 NEONATE, BIRTHWT >2499G, W SIGNIF OR PROC, W/O MULT MAJOR PROB

624 NEONATE, BIRTHWT >2499G, W MINOR ABDOM PROCEDURE

DRG#	Description
625	NO LONGER VALID
626	NEONATE, BIRTHWT >2499G, W/O SIGNIF OR PROC, W MULT MAJOR PROB
627	NEONATE, BIRTHWT >2499G, W/O SIGNIF OR PROC, W MAJOR PROB
628	NEONATE, BIRTHWT >2499G, W/O SIGNIF OR PROC, W MINOR PROB
629	NO LONGER VALID
630	NEONATE, BIRTHWT >2499G, W/O SIGNIF OR PROC, W OTHER PROB
631	BPD AND OTH CHRONIC RESPIRATORY DISEASES ARISING IN PERINATAL PE
632	OTHER RESPIRATORY PROBLEMS AFTER BIRTH
633	MULTIPLE, OTHER AND UNSPECIFIED CONGENITAL ANOMALIES, W CC
634	MULTIPLE, OTHER AND UNSPECIFIED CONGENITAL ANOMALIES, W/O CC